## ABSTRACT OF THE DISCLOSURE

Non-compensation signal points are determined in a two-dimensional plane without considering a signal error caused by digital quadrature modulation. The two-dimensional plane is defined by a real axis and an imaginary axis. The real axis corresponds to real-part signal components. The imaginary axis corresponds to imaginary-part signal components. Compensation signal points are determined in the two-dimensional plane in response to a signal error caused by digital quadrature modulation if the non-compensation signal points are used. The non-compensation signal points and the compensation signal points are point-symmetry. Digital information signal pieces are sequentially assigned to one of the compensation signal points in response to contents of the digital information signal pieces. The digital information pieces are subjected to a modulation process including digital quadrature modulation in response to the above-mentioned assignment to generate a radio-frequency transmission signal.